CP-D/CP-M
Circular Polarizer for Phoroptor®

User’s Guide
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Warnings & Cautions

Reichert Technologies® (Reichert®) is not responsible for the safety and reliability of this instrument when:

• Assembly, disassembly, repair, or modification is made by unauthorized dealers or persons.
• Instrument is not used in accordance with this User’s Guide.

⚠️ WARNING: AN INSTRUCTION THAT DRAWS ATTENTION TO THE RISK OF INJURY OR DEATH.

⚠️ WARNING: UNITED STATES FEDERAL LAW AND EUROPEAN REGULATIONS REQUIRE THAT ONLY A LICENSED PRACTITIONER OR A PERSON ACTING ON BEHALF OF A LICENSED PRACTITIONER PURCHASE THIS DEVICE.

⚠️ WARNING: THIS INSTRUMENT SHOULD BE USED IN STRICT ACCORDANCE WITH THE INSTRUCTIONS OUTLINED IN THIS USER’S GUIDE. REICHERT TECHNOLOGIES CANNOT GUARANTEE THE SAFETY OF THE OPERATOR AND THE PERFORMANCE OF THE INSTRUMENT IF THE OPERATOR USES THE INSTRUMENT IN A MANNER NOT SPECIFIED BY REICHERT TECHNOLOGIES.

⚠️ WARNING: DO NOT REPAIR OR SERVICE THIS INSTRUMENT WITHOUT AUTHORIZATION FROM THE MANUFACTURER. EXPERIENCED PERSONNEL OR DEALERS WHO ARE TRAINED BY REICHERT MUST PERFORM ANY REPAIR OR SERVICE TO THIS INSTRUMENT TO PREVENT SERIOUS INJURY TO THE OPERATOR OR PATIENT.

⚠️ WARNING: MODIFICATIONS TO THIS INSTRUMENT ARE NOT ALLOWED. ANY MODIFICATION TO THIS UNIT MUST BE AUTHORIZED BY REICHERT OR SERIOUS INJURY TO THE OPERATOR OR PATIENT MAY OCCUR.

⚠️ WARNING: NO PERSON IS ALLOWED TO MODIFY THIS INSTRUMENT. REICHERT MUST AUTHORIZE ANY MODIFICATION TO THIS UNIT TO ENSURE CORRECT OPERATION.
Warnings & Cautions (continued)

CAUTION: AN INSTRUCTION THAT DRAWS ATTENTION TO THE RISK OF DAMAGE TO THE PRODUCT.

CAUTION: DO NOT USE SOLVENTS OR STRONG CLEANING SOLUTIONS ON ANY PART OF THIS INSTRUMENT TO ENSURE THAT YOU DO NOT DAMAGE THE UNIT. SEE THE CLEANING & MAINTENANCE SECTION OF THIS GUIDE FOR DETAILED CLEANING INSTRUCTIONS.

CAUTION: DO NOT USE AMMONIA-BASED CLEANERS TO ENSURE THAT YOU DO NOT DAMAGE THE INSTRUMENT. SEE THE CLEANING & MAINTENANCE SECTION OF THIS GUIDE FOR DETAILED CLEANING INSTRUCTIONS.

CAUTION: USE OF ACETONE MAY CAUSE DAMAGE TO THE LENSES.

CAUTION: DO NOT AUTOCLAVE OR DISINFECT USING HIGH TEMPERATURES OR DAMAGE TO THE UNIT WILL OCCUR.
Symbol Information

The following symbols appear on the instrument.

- Consult Instructions for Use
- Caution symbol indicating important information and maintenance instructions included in this User's Guide
- Date of Manufacture: 2015
- Catalog Number
- Serial Number
- Compliance to Medical Device Directive 93/42/EEC
- Fragile Contents in Shipping Container - handle with care
- Keep Dry - Keep package away from rain
- Authorized Representative in European Community
Introduction

Congratulations on your purchase of the Reichert Technologies (hereafter referred to as Reichert) CP-D or CP-M.

This User’s Guide is designed as a training and reference manual for operation, maintenance, and troubleshooting. We recommend that you read it carefully prior to use and follow the instructions in the guide to ensure optimum performance of your new instrument. Only properly trained eye care professionals, such as ophthalmologists, optometrists, opticians, and eye care technicians should operate this instrument.

Please retain this guide for future reference and to share with other users. For additional copies of this manual or questions related to the CP-D or CP-M, contact your local authorized Reichert dealer, or contact our Customer Service department directly:

Tel: 716-686-4500
Fax: 716-686-4555
Email: reichert.information@ametek.com

Indications for Use
The CP-D or CP-M is designed to provide a field replaceable, retrofittable means of adding circular polarizers to the Phoroptor® VRx, Auto Phoroptor RS®, Visutron 900+, Visutron 900 Touch, Ultramatic RX Master™ Phoroptor® and Illuminated Phoroptor®.

Contraindications
There are none associated with the CP-D or CP-M.
Unpacking Instructions

Great care is taken to deliver your CP-D or CP-M to you intact. Please read this User’s Guide before operating the unit. We package the instrument in shipping containers to protect the instrument from damage during shipping. Please carefully remove the parts from the packaging material.

**Note:** Please retain the original packaging and use it if future transportation of the instrument is required.

**Note:** The 16260 CP-D is longer, and is designed to fit all Reichert digital Phoroptors. The 16261 CP-M is shorter, and is designed to fit all Reichert manual Phoroptors. The CP-D comes with both the Square and Round Mount so the necessary Mount can be installed. The CP-M only comes with the Square Mount.

Open the box and remove all the contents. Be sure that all the parts are included. Refer to Figures IS-01 and IS-02.

**Figure IS-01, CP-D 16260 Parts**

- **Round Mount**
  - P/N 16213-075
- **Screw**
  - P/N 140-122-41
- **Top Beam**
  - P/N 16213-070
- **Square Mount**
  - P/N 16213-072
- **Screw**
  - P/N X76461
- **Right Polarizer Assembly**
  - P/N 16213-885
- **Left Polarizer Assembly**
  - P/N 16213-886

**Figure IS-02, CP-M 16261 Parts**

- **Round Mount**
  - P/N 16213-075
- **Screw**
  - P/N 140-122-41
- **Top Beam**
  - P/N 16213-074
- **Square Mount**
  - P/N 16213-072
- **Screw**
  - P/N X76461
- **Right Polarizer Assembly**
  - P/N 16213-885
- **Left Polarizer Assembly**
  - P/N 16213-886
Instrument Setup

CP-D

Setup
Determine the mounting configuration needed for the digital Phoroptor.

If a square style reading rod holder is used, secure the square post with the screw. Refer to Figure IS-03.

If the round style reading rod holder is used, secure the round post with the screw. Refer to Figure IS-04.

Installation
Install the CP-D into the Phoroptor by placing the Square or Round post into the reading rod holder of the Phoroptor head. Secure it by tightening the Securing Screw on the Phoroptor head. Refer to Figure IS-05.
Instructions for Use

CP-M

Setup
The CP-M only comes with the Square Mount, and it is already installed. This is because all manual Phoroptors use the Square Mount.

Installation
Install the CP-M into the Phoroptor by placing the Square post into the reading rod holder of the Phoroptor head. Secure it by tightening the Securing Screw on the Phoroptor head. Refer to Figure IS-06.

Figure IS-06, Install with Square Mount

After installation, the CP-D or CP-M will have the polarizers centered in front of the apertures. Refer to Figure IS-07.

Figure IS-07, Installed View
Cleaning & Maintenance

**External Cleaning**

**CAUTION:** DO NOT USE SOLVENTS OR STRONG CLEANING SOLUTIONS ON ANY PART OF THIS INSTRUMENT OR DAMAGE TO THE UNIT MAY OCCUR.

**CAUTION:** USE OF AMMONIA BASED CLEANERS MAY CAUSE DAMAGE TO THE LENSES.

**CAUTION:** USE OF ACETONE MAY CAUSE DAMAGE TO THE LENSES.

Clean the external surfaces of this instrument using a clean, soft cloth moistened with a mild detergent solution (1 cc of liquid dish soap to one liter of clean water).

Clean the lenses of the unit with a soft cloth moistened with either 70% Isopropyl Alcohol or a mild detergent solution (1 cc of liquid dish soap to one liter of clean water).

**Replacing A Polarizer Assembly**

If a Polarizer Assemblies needs replacement, remove the screw securing the Polarizer Assembly to the Top Beam. Replace the Polarizer Assembly with a new one, and secure it with the screw. Refer to Figure CL-01.

![Figure CL-01 Replacing Polarizer Assembly](image1.png)

**Note:** There is a colored dot (blue or yellow) on the back side of each Polarizer Assembly to differentiate the left from the right. Be sure not to switch the assemblies. Refer to Figure CL-02.

![Figure CL-02 Left & Right Polarizer Assemblies](image2.png)
## Specifications

### Physical Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP-D - 16260</td>
<td>21.27 cm (8.37 in)</td>
<td>12.54 cm (4.94 in)</td>
<td>1.58 cm (0.63 in)</td>
<td>0.068 kg (0.15 lb)</td>
</tr>
<tr>
<td>CP-M - 16261</td>
<td>17.78 cm (7.00 in)</td>
<td>12.54 cm (4.94 in)</td>
<td>3.81 cm (1.50 in)</td>
<td>0.068 kg (0.15 lb)</td>
</tr>
</tbody>
</table>

### Disposal

Dispose of the CP-D and CP-M in accordance with local regulations. The CP-D and CP-M contains no hazardous materials.

### CP-D - 16260

For use with controller software:

- Visutron 900+ V 2.6.0.3 or later
- Visutron 900 Touch V 1.1.5.0 or later
- Autophoroptor RS V 3.0.2.7 or later
- Phoroptor VRx V 1.1.5.0 or later
Warranty

Warranty and Limitation of Liability
This product is warranted by Reichert Technologies ("Reichert") against defective material and workmanship under normal use for a period of one year from the date of invoice to the original purchaser. (An authorized dealer shall not be considered an original purchaser.) Under this warranty, Reichert’s sole obligation is to repair or replace the defective part or product at Reichert’s discretion.

This warranty applies to new products and does not apply to a product that has been tampered with, altered in any way, misused, damaged by accident or negligence, or that has the serial number removed, altered or effaced. Nor shall this warranty be extended to a product installed or operated in a manner not in accordance with applicable Reichert instruction manual, nor to a product that has been sold, serviced, installed or repaired other than by a Reichert factory, Technical Service Center, or authorized Reichert Technologies Dealer.

Lamps, bulbs, charts, cards and other expendable items are not covered by this warranty.

All claims under this warranty must be in writing directed to the Reichert factory, Technical Service Center, or authorized instrument dealer making the original sale and must be accompanied by a copy of the purchaser’s invoice.

This warranty is in lieu of all other warranties implied or expressed. All implied warranties of merchantability or fitness for a particular use are hereby disclaimed. No representative or other person is authorized to make any other obligations for Reichert. Reichert shall not be liable for any special, incidental, or consequent damages for any negligence, breach of warranty, strict liability or any other damages resulting from or relating to design, manufacture, sale, use or handling of product.

PATENT WARRANTY
If notified promptly in writing of any action brought against the purchaser based on a claim that the instrument infringes a U.S. patent, Reichert will defend such action at its expense and will pay costs and damages awarded any such action, provided that Reichert shall have sole control of the defense of any such action with information and assistance (at Reichert’s
expense) for such defense, and of all negotiation for the settlement and compromise thereof.

PRODUCT CHANGES
Reichert reserves the right to make changes in design or to make additions or improvements in its products without obligation to add such to products previously manufactured.

CLAIMS FOR SHORTAGES
We use extreme care in selection, checking, rechecking and packing to eliminate the possibility of error. If any shipping errors are discovered:
1. Carefully go through the packing materials to be sure nothing was inadvertently overlooked when the unit was packed.
2. Call the dealer you purchased the product from and report the shortage. The materials are packed at the factory and none should be missing if the box has never been opened.
3. Claims should be filed within 30 days.

CLAIMS FOR DAMAGES IN TRANSIT
Our shipping responsibility ceases with the safe delivery in good condition to the transportation company. Claims for loss or damage in transit should be made promptly and directly to the transportation company.

If, upon delivery, the outside of the packing case shows evidence of rough handling or damage, the transportation company's agent should be requested to make a “Received in Bad Order” notation on the delivery receipt. If within 48 hours of delivery concealed damage is noted upon unpacking the shipment and no exterior evidence of rough handling is apparent, the transportation company should be requested to make out a “Bad Order” report. This procedure is necessary in order for the dealer to maintain the right of recovery from the carrier.